

# New York State Department of Transportation

## Yellow Flag NB2222W007

By: Sahadeo Bhagwandin  
Flag Date: March 29, 2022

Superseding Information:  
This flag supersedes: YF NB2197W036

### Structure Information

**BIN: 1065318**  
**Feature Carried:** 278I278IX2M23027  
**Feature Crossed:** 6TH AVENUE  
**Orientation:** 8 - NORTHWEST  
**Region:** 11 - NEW YORK CITY  
**County:** KINGS  
**Political Unit:** City of NEW YORK  
**Approximate Year Built:** 1962  
**Posted Load Matches Inventory :** Yes  
**Bridge Load Posting (Tons) :** Not Posted for Load  
**Primary Owner:** New York State Department of Transportation  
**Primary Maintenance Responsibility:** 12 - State - Subcontracted to another Party  
**Typical or Main Span Type:** 3 - Steel, 02 - Stringer/Multi-Beam or Girder  
This Bridge is not a Ramp  
**Number of Spans:** 322

### Verbal Notification Information

**Person Notified:** Heinz Joachim, P.E.  
**Date:** March 29, 2022 10:00:00 AM  
**Of:** NYSDOT Region 11

### Signature Information

**Signature:** Sahadeo Bhagwandin, P.E. 088239-1  
**Date:** April 10, 2022  
**Reviewed By:** Robert Kemp  
**Date:** April 10, 2022

**Attachments:** 6

**Flagged Elements**

Parent Element	Element	Total Quantity	Unit
<b>Span Number : 253</b>			
	107 - Steel Open Girder/Beam	989	ft
	PR831 - Steel Beam End	42	each

**Flagged Condition Description**

This Yellow Flag NB2222W007 supersedes YF NB2197W036.

Location: Span 253, Girder G16 at Pier 253

Description: The bottom web of the Girder G16 at the connection angle exhibits a 1-1/2" long vertical crack (previous 1-1/8") initiating from the bottom cope and extending into connection angle (Photos 3 and 4). A Dye Penetration test was performed on the member to determine the extent of the crack.

The affected member Girder G16 is a load path redundant built-up steel girder consisting of varying web depth x 3/8" thick and two equal leg angles (L 5" x 5" x 1/2") for the top and bottom flanges (Photo 2). The spacing between Girder G15 and G16 is 3'-9.75" on center and 6'-11" on center from G17 (Photo 1).

See attached photos and sketches for details.

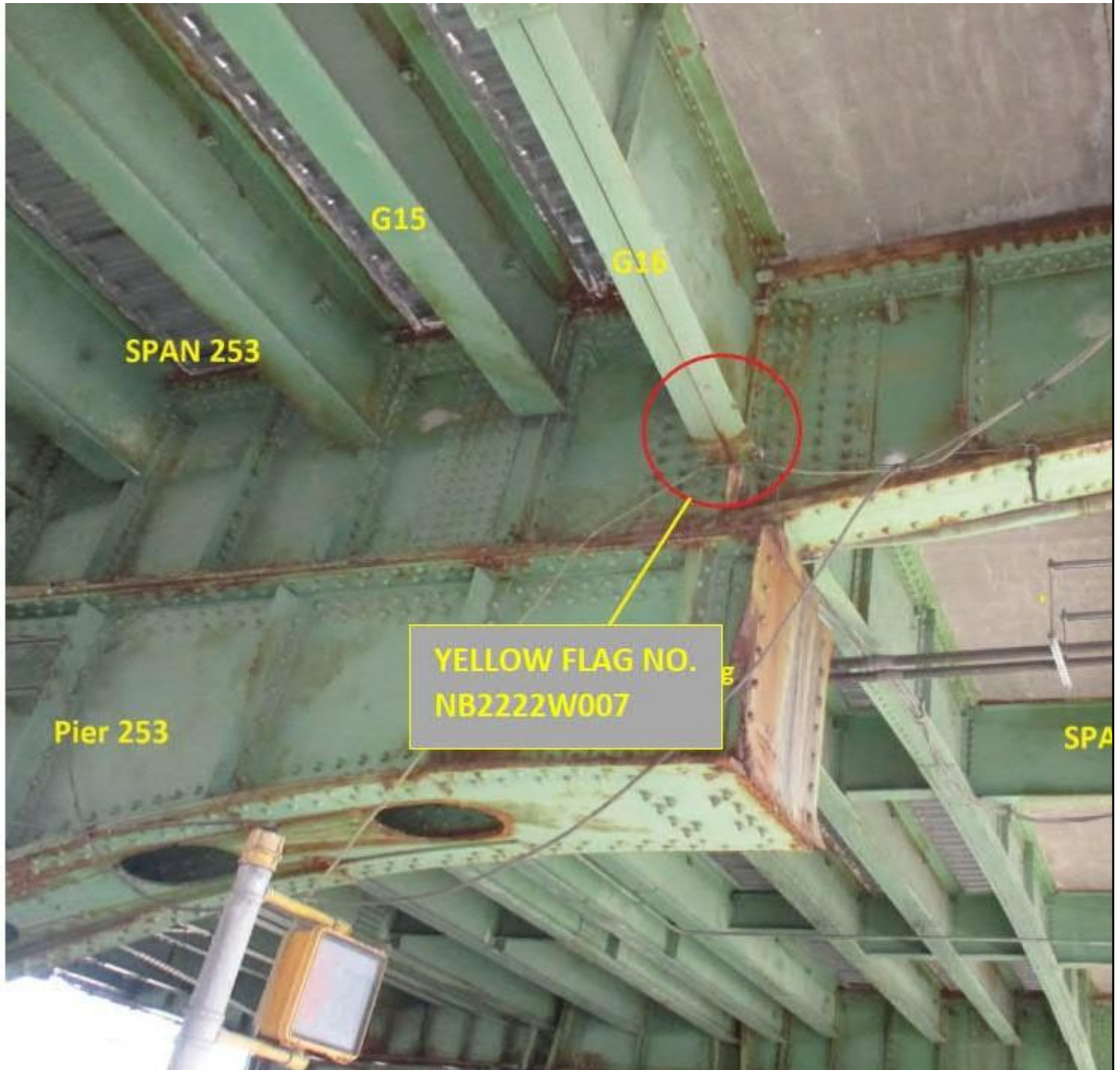
Notes:

- 1.No deformation was observed in any part of Girder G16 connection to Pier 253 cap beam.
- 2.The web at the top cope exhibits a 2" H x 2" W area of up to 50% section loss. The lower web above the bottom flange angle exhibits a 12" L x 1"-3" H area of up to 1/16" D section loss.
- 3.The adjacent Girders G15 and G17 are in good conditions.
- 4.Left lane closure at 3rd Avenue in Eastbound travel direction at 21st Street, and a 35' bucket truck are required to access this location.

**Flag Photographs**

Photo Number: 1

Photo Filename: Photo 1-4611 edit.jpg



**Attachment Description:** Span 253, Girder G16 at Pier 253. General View of flagged location. Looking end.

Photo Number: 2

Photo Filename: Photo 2-4637 edit.jpg



**Attachment Description:** Span 253, Girder G16 left face at Pier 253. Close-up view of flagged location. Looking end right.



Photo Number: 3

Photo Filename: Photo 3-4616.jpg



**Attachment Description:** Span 253, Girder G16 left face at Pier 253. 1-1/2" long vertical crack at lower web before dye test. Looking end right.

Photo Number: 4

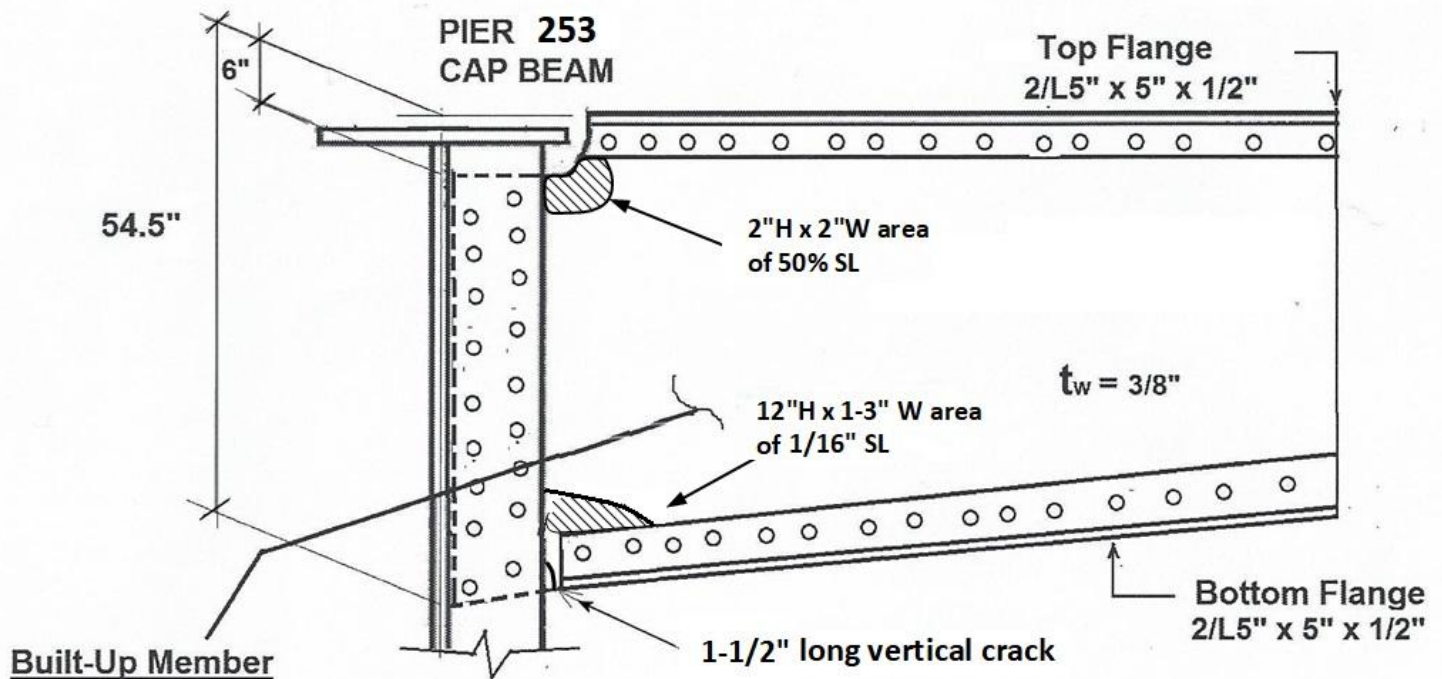
Photo Filename: Photo 4-4639.jpg



**Attachment Description:** Span 253, Girder G16 left face at Pier 253. 1-1/2" long vertical crack at lower web after dye test. Looking right.

Photo Number: 5

Photo Filename: SN253 PR253 G16 \_ Sketch \_ Left face.jpg



### Built-Up Member Properties

Vary depth web: 54.5" b-to-b Ls @ Piers 252 and 253 and 33" @ midspan

Web thickness = 3/8"

Bottom and Top Flanges are two equal leg angles L 5" x 5" x 1/2"

*Attachment Description: SN 253 G16 at Pier 253 Sketch*



Photo Number: 6

Photo Filename: Framing plan Span 253 edit.jpg



**Attachment Description: SN 253 G16 ay Pier 253 Framing Plan**